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IN THE COMMON INTEREST

IN this issue we publish a paper which Mr. K. W. Francombe gave to the Yorkshire Junior Gas Association last Wednesday. On the occasion members of the Association were the guests of Whessoe, Ltd., and the meeting was held at Darlington. The author, a member of the Whessoe staff, has presented many technical contributions, both solo and jointly, on several gas industry platforms. His paper last Wednesday found escape from the purely technical aspect and considered —naturally from the contractors' angle—the place of the contractor in the gas industry. We think that what Mr. Francombe had to say is important and we commend the brevity of his pointed comments. We commend, too, the way in which he gave his paper. He did not read it in customary tedious fashion; he did not recite from a formal typescript abstract; he did not talk into his waistcoat. Consequently, he set, without fuss and pleasantly without exaggeration of effect, the tone of the meeting on a plane which led to interesting discussion, though, to our mind, the discussion was not very illuminating.

Mr. Francombe's paper, which set out some of the problems confronting every gas industry contractor, was in effect a just call for sympathetic understanding on the part of the 'caller of the tune,' and, paramount, a plea for fuller co-operation. We ourselves, not sharing Mancunian opinion, like to regard the contractors as within the industry, essentially integral in the work which the industry sets out to achieve. The author referred to a number of eminent men of original thought and uncommon drive whose names are perpetuated in firms whose announcements appear regularly in our columns. We could add to the list—but that is not our purpose here. The contractors are limited by the very fact that they have to take risks, that they have to deliver the goods, and that in some cases they may have to encounter a still-born baby. They have to be sensitive to trends, they have to employ intelligent staff, and they have to sink money, for good or ill, in new ventures. They hold no sinecure; and we say without hesitation that the gas industry is well served by the contracting side and that the Institution of Gas Engineers has shown reason in both its rules of membership and its election of occupants of the Presidential Chair during recent years. We look forward very much to another Presidency from the ranks of contractors, for it must be admitted that, for their existence, for their bread and butter, the contractors have to envisage a fairly wide field and have to bring to bear on their work a wide range of engineering experience.

On the other hand there is the point of view of the buyer of the plant, formerly the gas engineer who has to operate the plant on his works—nowadays, perhaps, some planning officer or the like who may instruct the gas engineer on what plant he should install and operate. The gas industry has its obligations; compared with the contractor it has a much more numerous technical staff; and it has its foibles as well as its original ideas. Incidentally, the gas supplier (through the consumers' meters) pays the contractors' bill, and his wishes have to be respected by the contractor. Fortunately for all concerned—and for the gas consumer in particular —the co-operation which obtains between gas supplier and gas plant maker is very good. Mr. Francombe asked whether it could be improved and he offered a series of suggestions which undoubtedly merit close consideration. As we have said, his paper was concise, and this lent added cogency to the arguments he adduced. Let us, by all means, have more creative preliminary consultation; let us allow reasonable time for design; let us take advantage of standardisation where standardisation is practical; let us have greater regard to the cost of tendering; let us be more sober in our demands. All this, nicely reasoned by Mr. Francombe, boils down to better co-operation in a common cause. And we do think that often the sinking of personal prejudice and the limiting of officialdom (under the cloak of wisdom) would minimise the problems confronting the gas contractor and the gas supplier. This does not imply the stifling of original concept. Far from it. It does imply a more scientific and at the same time a more human approach to the problem. That, we take it, is the underlying thought of the contractors' point of view as pleasantly put forward by Mr. Francombe.

NINE ELMS MAKES NEWS

AS a thoroughfare Nine Elms Lane would not rate very high among the handsome boulevards of the Metropolis. To associate with it the word 'festive' would require a considerable degree of imagination. Yet such is the magic wrought by our national affection for the Royal Family and the benevolence of the May sunshine that when the sleek Rolls Royce containing the Duchess of Kent bowled along the Lane on Thursday last, a spirit of pleasurable anticipation infused the customary industrial grime. The purpose of the Royal visit was to inaugurate the newly-constructed jetty and coal-handling plant and to open the new canteen on the works, and in so doing, the Duchess was continuing an interest in the affairs of the North Thames Gas Board which the Royal Family has held for many years; and it was the Duchess herself who, in 1948, inaugurated additional gas-producing plant at Beckton and laid the foundation stone of the welfare centre at the products works. She is, therefore, no stranger to the Board—or indeed to the industry as a whole, since attendance at many functions has brought her into frequent contact with various undertakings—and her presence at Nine Elms lent to the ceremony a charm associated all too rarely with such occasions of pomp and circumstance.

The new jetty is an important development. By enabling colliers to unload more quickly (2,600 tons a tide is the figure now obtainable), it is anticipated that between three and four shillings a ton may be saved on freighting and lighterage. One of the reasons is that the old dock was unable to accommodate vessels of more than 1,200 tons capacity, which meant that five of the Board's 14 colliers specially designed for up-river traffic were unable to call at Nine Elms. The three electrically-driven cranes, which provide a new item of interest on the industrial skyline, can handle, with their four-ton grabs, 250 tons an hour and two such cranes can unload the largest up-river colliers in no more than six or seven hours.

The North Thames Board is to be congratulated on its continued initiative, and we cannot help feeling that the inauguration of this new plant must have been a source of understandable pride not only to the members of the Board but more particularly to Dr. J. Burns, the Chief Engineer, his predecessor, Mr. N. Willsmer, who was also present, and of course, Mr. W. E. Davies, Station Engineer, who has under his control a works which for modernity and size can be equalled by few in the country.

JUNIORS AND CONTRACTORS

THE 1951-52 session of the 10 junior gas associations under the British Joint Council constitution is almost at an end; the engagements that remain are mostly in the nature of summer social events to which the ladies are invited. Looking back over the session it will be agreed that visits to the works of contractors and makers of appliances have occupied an even more important place in the syllabus than in previous sessions. Relations between the juniors and those who have service in the form of plant and appliances to offer to the gas industry have never been more cordial, yet there remain some associations, of which Manchester is one, which exclude the other side of the industry from any form of membership. Opposition in those associations is based on a variety of views as to 'buyer' and 'seller' remaining on opposite sides of the counter, with entire disregard of the fact that the parent Institution of Gas Engineers has long recognised that the two sides are mutually interdependent and that if a man possesses the requisite technical qualifications it matters not whether he makes or uses a particular piece of plant or supervises the production or the installation of an appliance.

We were prompted to these reflections as we went round the works of W. J. Jenkins & Co., Ltd., at Retford the other day in company with the Manchester Juniors. Two at least of the senior officers who acted as guides had formerly been on the supply side and had taken important office in junior associations but had become disqualified for membership on transferring to the contracting side. At the same time at least one of the guests, a North Western group production engineer, had formerly been on Jenkins' staff but on taking a post on the supply side immediately became eligible for membership. The junior associations might well think again—especially before their rules and constitutions come up for review—on the question of whether they can do without the active membership of men on the contracting side. They certainly cannot do without their services to the undertakings in which they themselves are employed.

B.G.S.A. PROGRESS

THREE years after vesting day for the gas industry the British Gas Staff Association has attained a membership of 17,326, a net increase of 426 on the past year, out of a total of 33,310 administrative, technical, and clerical employees, to which number must be added about 5,000 non-manual meter readers and collectors, making a total of 38,310. Having regard to the fact that the Association has a 'non-poaching' understanding with the National Association of Local Government Officers, whose gas staff section has something over 10,000 members and that in the North Thames area and at Sheffield there is friction between the Association and the National Union of General and Municipal Workers, a membership of 100% is obviously unattainable. In going approximately half way in so short a time the Association has more than realised the most optimistic hopes of the founders, and it is satisfactory to note that 'in general, good relations now exist between the Association and other unions with which it is associated in negotiations,' despite the friction with the N.U.G.M.W. to which we have already referred. An increasing degree of confidence between the Gas Council and the area boards on the one hand, and the Association on the other, is noted in the annual report, which acknowledges 'splendid services' rendered by the many voluntary officers of branches and area councils. The 164 branches are carrying out their functions adequately but wide differences in size of branches present a difficult problem. If a branch is too small there is difficulty in finding suitable officers; if it is too big it is very hard to

retain interest; the solution is left to geographical considerations, industry grouping, and the wishes of members. Area councils have continued to co-ordinate the work and opinions of the branches, and the trend appears to have been for branches to deal with matters at undertaking and group level, area councils at area level, and the National Council at national level.

This year for the first time the Association went outside London for its annual conference. The choice of Harrogate was a happy one and from reports we have received all the sessions were well attended, enthusiastic, and in every sense successful. Both the annual report and the agenda—which contained 87 items—dealt in the main with terms and conditions of service, negotiations, organisation, and policy. The report was a record of work well done; the resolutions passed during the two days' sittings were in no sense revolutionary, but many of them were to the point. The report expressed concern that the proposed superannuation scheme was not yet available, but there were hopes that it would not be long before it reached the staff side of the National Joint Council. The Gas Council has been asked to give sympathetic consideration to the plight of superannuated staff whose income has not kept pace with rising costs of living. Among the more general resolutions was one asking for all carbonising activities to be placed under the control of the area boards; another supported the many recent protests regarding coal price discrimination against the gas industry. Unlike the majority of unions the Association believes in keeping good officers when it gets them, hence the re-election of Mr. W. E. Webb as Chairman and Mr. C. C. Holt, of York, as Vice-Chairman (despite opposition from Mr. G. R. Greenway, of Bristol), and of the same two auditors as have served for some years.

GRAVE CONCERN ON RESEARCH

GRAVE concern is expressed by the Advisory Council of the Department of Scientific and Industrial Research in the annual report of the Department for 1950-51 at the delay in giving full effect to the Department's post-war plans, the realisation of which has been seriously hampered especially by difficulties in recruitment and building. The Council states what it considers to be the 'minimum expansion of the Department's resources which the needs of defence and the economic future of the country demand.' As regards staff the post-war plans called for an increase of scientific and administrative staff from 2,160, the number attained in 1946, to about 4,000. The staff now numbers some 3,000. The average recruitment since the war has been about 150 a year, but during the past two years the average has dropped to only 110. The Council regards this rate of growth as too low, and despite increased demands of the services and the defence research establishments as a result of re-armament, the Council considers that every effort should be made to maintain it at 150 at least. A substantial building programme which at today's prices would cost £10 mill. was included in the post-war plan, but progress has been 'extremely disappointing.' Year by year expenditure has lagged behind schedule, and when at length it seemed possible that the rate of expenditure could be raised to the agreed level of £1 mill. a year a severe cut was imposed, and it is doubtful whether expenditure will reach £500,000 for 1951-52. A special handicap has been the difficulty in securing new sites for stations and obtaining land for extensions. In one case over 40 sites have been examined in the last five years without a suitable one having been secured. The main difficulty is not in meeting the Department's technical requirements but in obtaining the consent of the numerous authorities concerned, both central and local.

The report points out that limitations on capital investment act as a brake on the exploitation of scientific advances and foster those types of research which are likely to yield improvement without major capital outlay. Such work includes the better use of men and machines by the adoption of new and improved production engineering techniques and the study of human factors affecting industrial production. An increasing number of D.S.I.R. establishments and research associations are engaged in productivity surveys. A survey of research on the human factor in industry has been prepared jointly by the Department and the Medical Research Council, and the best means of continuing and extending such work are under consideration. Concluding its report, the Council says: 'The ultimate justification for the Department's expenditure must be found in a larger national income. Far-sighted men on both sides of industry realise the need for a greater use of science, but there are still too many cases where both sides alike are apathetic. If this country is again to be prosperous, British industry must make science a real and living force in its daily life. There is no need to learn this lesson, as we have learnt so many in the past, through bankruptcy and unemployment, but time is getting short.' The report is published by the Stationery Office, price 7s. 6d., by post 7s. 11d.

THE FIRST THREE YEARS

MEMBERS of gas consultative councils whose initial three years term of office is about to expire do not appear to be unduly perturbed about the future. They have done useful work in a hitherto unexplored field and we cannot think of any reasons why they should not be reappointed, with thanks for past services. Among those whose membership is due to come under review are the chairmen who are *ex officio* paid part-time members of their respective area boards and in no single case does there appear to be any reason for denying those now in office the opportunity of making use in the next three years of the useful lessons they have learnt during their 'apprenticeship.' Not all of them had previous intimate experience of the gas industry, but we are writing with the latest meeting of the Eastern Gas Consultative Council more especially in mind, in which case the Chairman has spent about 50 years in the industry. The consultative councils are now putting the finishing touches to their third annual reports. The Eastern Council, which has dealt with 37 complaints in the past 12 months, has been almost constantly concerned with the question of freedom of choice between gas and electricity for council house tenants which becomes acute in those cases where the local authority, in its quest for economy, deems it inexpedient to install both services

while houses are being built. The conflict—call it competition, or lack of liaison if you will—between gas and electricity is causing the council some concern and it considers that the time has arrived when a national fuel policy should be determined; as that question is under the consideration of the Ridley Committee the council makes no further comment.

Personal

Sir William Acland, BART., M.C., A.F.C., of Welwyn, has resigned his membership of the Eastern Gas Consultative Council.

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Mr. Leslie Hardern, Public Relations Officer, North Thames Gas Board, has been elected a Fellow of the Institute of Public Relations.

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Mr. F. W. Allum, A.C.A., A.C.W.A., Chief Accountant, North Eastern Gas Board, has been elected Deputy Mayor of Harrogate.

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Mr. L. J. Vagg, Industrial Gas Engineer to the Bath Division, South Western Gas Board, has taken up an appointment as Assistant Industrial Gas Engineer to the Wales Gas Board.

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Mr. John C. Barwick, General Manager of Clapham Brothers, Ltd., has been elected President of the Keighley Association of Engineers for a second year and has been nominated by the Association for the Presidency of the West Riding Engineering Federation, comprising eight engineering associations.

Obituary

Alderman W. J. Finch, J.P., of Norwich, a member of the Eastern Gas Consultative Council and Chairman of the Norwich Divisional Committee, died suddenly on May 16. A vote of condolence was passed at a meeting of the Council on May 19.

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Mr. R. J. Lock, a nominee of the Federation of British Industries on the Ipswich Divisional Committee of the Eastern Gas Consultative Council, died on April 25, it was reported at a meeting of the Consultative Council last week. Alderman R. Turner, J.P., Chairman of the Council, is to ask the F.B.I. to nominate a successor to Mr. Lock, who was Chief Maintenance Engineer to Ransome, Sims, and Jefferies, Ltd., Ipswich.

Mr. **Robert Scott,** who was Sales Manager for Thomas Glover & Co., Ltd., until his retirement in 1951 after 30 years service, died on May 15 at the age of 75. He retired to Guernsey where he had a house at Mare de Cartaret, Castel. He was a very prominent Mason and was a founder of the Murdoch Lodge and P.A.G.D.C. of Warwick. He leaves a widow and daughter, and a son, Mr. Douglas Scott, who is Northern Sales Manager for Thomas Glover & Co.

Diary

May 29.—North Thames G.C.C.: Westminster City Hall, 2.30 p.m.

June 3.—South Eastern G.C.C.: Caxton Hall, Westminster, 2.15 p.m.

June 4.—Southern G.C.C.: Grand Hotel, Bournemouth, 11 a.m.

June 5.—Midland Juniors: Ladies' Day.

June 7.—Wales Juniors (North Wales Section): Ladies' Day, Llandudno.

June 7.—Scottish Juniors (Eastern): Annual Outing, Grangemouth.

June 9-10.—Eastern Section, I.G.E.: Spring Meeting, Grand Hotel, Sheringham. June 9: Golf and Bowls; afternoon meeting, with Chairman's Address by T. C. Battersby; evening reception. June 10: Business meeting, paper by G. E. Thomas, Industrial Gas Engineer, Watford Division; official luncheon.

June 11.—South Western G.C.C.: Meeting at 34, Bridge Street, Taunton, 11 a.m.

June 13.—London and Southern Juniors: Annual Business Meeting, 178, Edgware Road, 6.30 p.m.

June 16-21.—International Gas Union: Fifth International Gas Conference, Brussels.

June 19.—Wales Juniors: Ladies' Day. Visit to Ascot Gas Water Heaters, Ltd., Neasden.

June 20.—Scottish Juniors (Western): Annual Golf Outing and Competition.

June 20.—Northern Juniors: Annual General Meeting. Newcastle.

June 21.—Western Juniors: Summer Meeting and Ladies' Day, Minehead.

June 21.—London and Southern Juniors: Summer Visit and Ladies' Day, Maidstone.

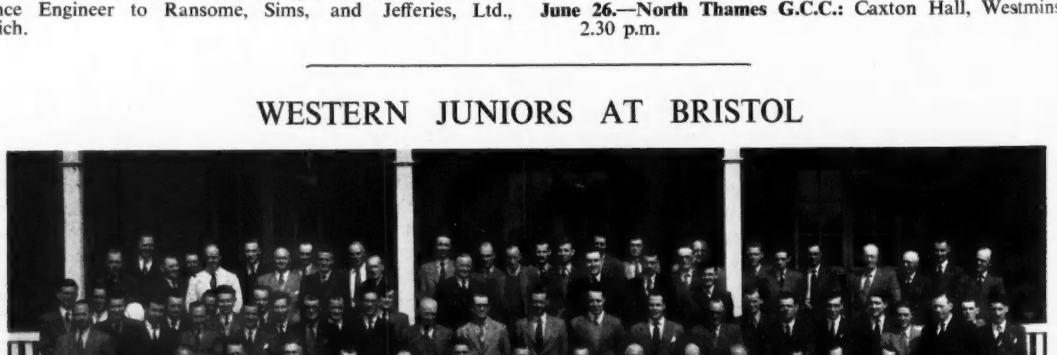
June 21.—Manchester Juniors: Ladies' Day, Morecambe and Lancaster.

June 23-25.—British Wood Preserving Association: Second Convention, Queen's College, Cambridge.

June 24.—London and Southern Section, I.G.E.: Summer Meeting.

June 26.—North Thames G.C.C.: Caxton Hall, Westminster, 2.30 p.m.

WESTERN JUNIORS AT BRISTOL



Members of the Western Junior Gas Association inspected the Stapleton Road works of the Bristol sub-division before hearing their President, Mr. T. W. Clapham, deliver his Presidential Address at the annual general meeting on April 19.

CATERING AND ARCHITECTURE

A special exhibition of large cooking equipment recently held by the Leicestershire and Rutland sub-division of the East Midlands Gas Board, at the Central Showrooms, Market Street, Leicester, in collaboration with Radiation (Large Cooking Equipment) Ltd., proved of considerable interest to all sections of the catering industry. In addition to trade enquiries, visits were paid by students of the School of Architecture of the College of Art, Leicester, catering students from the Central Institute, domestic science college students, and members of the Leicester Caterers' Association. The photograph shows a section of the exhibition and was taken during a visit from students of the Leicester School of Architecture.

Spring Comes to the Lake District

THE Penrith division of the Northern Gas Board organised a three and a half day Easter Fair at Keswick, which was opened by Dame Vera Laughton Mathews, D.B.E., supported by representatives from the local authority and the Northern Gas Consultative Council.

The theme of the exhibition embodied a combined appeal to Lakeland caterers and housewives, featuring large scale and domestic cooking with especial emphasis on packed meals for walkers.

A highlight of the domestic sessions was a wedding breakfast buffet for the Easter bride, complete with three-tiered cake in an appropriate setting with a background featuring an attractive decor for the occasion and floral arrangements.

Various intriguing episodes were staged such as a 'Coffee Gossip' at 11 o'clock one morning, while beauty culture was introduced another day directed mainly towards preserving feminine beauty from the ravages of spring cleaning. This was received with the greatest enthusiasm by capacity houses and allowed for some subtle propaganda.

The success of the event may be best judged by the number of visitors, which showed that from the town's population of 4,700 a total attendance at the lecture demonstrations of 1,350 was achieved.

East Midlands Civil Defence Course

FIFTY - SEVEN senior executive officers of the East Midlands Gas Board met at Nottingham on May 10 and 11 to undergo an intensive civil defence basic general course. Mr. Sydney Smith, Chairman of the Board, was in the chair, supported by Mr. E. H. Harman, Deputy Chairman, and by Mr. A. Gwynne Davies, Secretary.

Other officers present included the Chief Accountant, Deputy Chief Accountant, Commercial Manager, Technical Officer, Industrial Relations Officer, Coal and By-products Officer, Deputy Secretary, Coke Marketing Officer, divisional general managers, subdivisional managers, divisional engineers certain group managers, local managers and works engineers and the divisional civil defence liaison officer.

The Chairman stated that as a result of discussions at a divisional general managers' conference, it was decided that a civil defence basic general course should be arranged for senior executive officers.

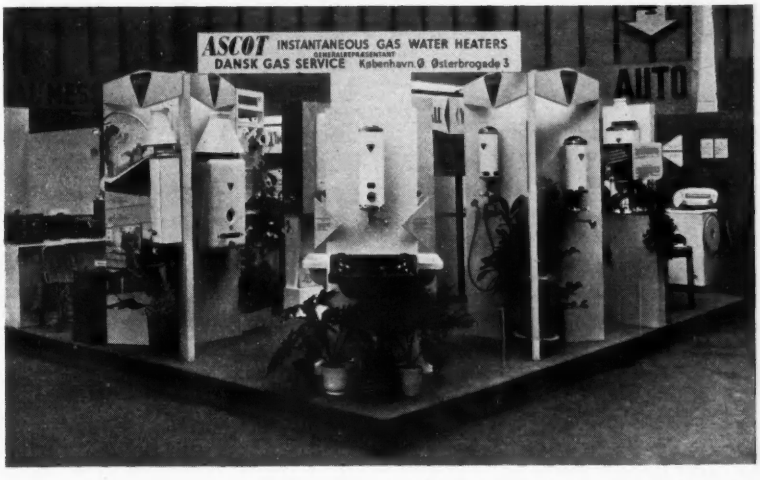
The main lectures were given by Mr. A. S. Nunn, Area Civil Defence Officer, and Mr. A. T. Raby, Education and Welfare Officer. Dr. R. W. Kind, Medical Officer of Health for Wigston U.D.C. was invited as a guest instructor to give a lecture on biological warfare.

On the first day Mr. Nunn lectured on chemical warfare and high explosives and Mr. Raby dealt with fire, on the second day Mr. Nunn gave a lecture on atomic warfare, Dr. Kind presented notes on biological warfare and Mr. Raby dealt with shelters and shelter policy, and the national civil defence organisation and the works and building emergency organisation. An open forum was conducted by Mr. Sydney Smith.

Demonstration of radiac meters and the use of the pocket vapour detector using simulant gases and specially prepared papers were given at the conclusion of the lectures on the first day. Further demonstrations were given at the conclusion of the course by Dr. Kind who used radiac meters of his own construction to show the effect of screening metals and the detection and absorption of beta particles.

In his closing address, the Chairman thanked senior executives for so willingly giving up a precious week-end to undertake civil defence training. They had received useful revision of such subjects as fire and high explosives, but keen interest had been shown in the newer aspects of chemical warfare due to the introduction of nerve gases and the details of the atomic bomb with the possible problems which might have to be faced. This was indicated by the number of questions which were put to the lecturers throughout the course.

ASCOT HEATERS ON SHOW IN DENMARK



Our photograph shows the Ascot stand at the Copenhagen Trades Fair. The models displayed were for use both with town and bottled gas.

A GREAT DAY AT NINE ELMS

Duchess of Kent Inaugurates New Plant

THE interest which the Royal Family took in the progress of the Gas Light and Coke Company lives today in its acknowledgment of the steady development of the North Thames Gas Board. This was strikingly illustrated on May 21, when the Duchess of Kent, who only four years ago inaugurated the third battery of coke ovens and laid the foundation stone of the welfare centre at Beckton, visited the Nine Elms works to inaugurate the newly constructed jetty and coal handling plant and to open the new canteen on the works.

At every stage of this event were discernible the fruits of careful and experienced planning, but not even the ingenuity of the Board's officers could have induced the brilliant sunshine which lent the final touch of colour to the riverside ceremony.

On arrival the Duchess was greeted by the Chairman of the Board, Mr. Michael Milne-Watson, and the Mayor of Battersea, Councillor D. A. G. Prichard, J.P., and was introduced to the principal guests. The latter included Mr. Douglas Jay, M.P. for Battersea North, Colonel H. C. Smith, C.B.E., Chairman of the Gas Council, and Mr. R. Kelf-Cohen, C.B., Under Secretary, Ministry of Fuel and Power.

On the bridge leading to the jetty Mr. Milne-Watson, in a short speech, welcomed the Royal visitor. Commenting on 'the particular pleasure and satisfaction we derive from this visit of Your Royal Highness which, to us, shows a continued interest in the gas industry of which we form part,' Mr. Milne-Watson spoke of the Board's dependence on two factors in its task of serving the public. One, he said, was the supply of coal; the other, the good relations of all the men and women who process it. This, he said, marked a further stage in their development under these two aspects, for where they now stood was the new coal unloading and handling plant, with the Board's latest collier alongside, and shortly Her Royal Highness would see the new canteen which they had built to improve the working conditions of their employees by providing good food in cheerful surroundings. Nine Elms had a history of nearly a hundred years, and was today one of the Board's most important gasworks in size and in economy of working, since it carbonised 440,000 tons of coal a year, all of which came direct from the ports of Durham and Northumberland by sea-going collier—the cheapest form of transport. This great plant, he added, contained many novel and interesting features, and formed therefore an essential link in the service that the Board was giving to nearly two million homes, business premises and factories in a large part of London and adjoining counties.

Responding, the Duchess remarked that when she visited Beckton four years previously she had been much impressed by the vast expansion of operation by a modern gasworks. At that time the Company was embarking upon a great scheme of reconstruction to make good the damage brought about by the war and to keep pace with the increasing demands made upon the industry. Today, in visiting Nine Elms, she was glad to have an opportunity of seeing something more of the work of development and expansion which was now being carried on by the Board. The Duchess said she understood that the jetty which she was to declare open would greatly accelerate the speed at which coal for gas production could be unloaded, and that it incorporated several new features of design. It was obvious that every saving that could be effected would contribute not only towards the welfare of the country as a whole, but also to the thousands of consumers in the area around London served by Nine Elms and the many thousands of homes dependent for their cooking and warmth upon the service provided by this works. While she was at Beckton she had been able to lay the foundation stone of a new welfare centre and she was especially glad, therefore, that during the course of her tour that afternoon she would open the new works canteen which had been equipped with every modern facility and which was designed to cater for the large numbers of people who came there daily in order to provide this essential service.

In response to Mr. Milne-Watson's invitation, the Duchess cut the ribbon at the entrance to the jetty and went aboard the M.V. Accum which was berthed alongside the jetty. After meeting the Master, Captain Allan, who presented his officers and crew, the Duchess returned to the jetty where she operated the telegraph, thus setting one of the

A fine view of the new jetty with its three electrically-driven cranes, each capable of handling 250 tons of coal per hour.

On her arrival at Nine Elms the Duchess of Kent was introduced to members of the North Thames Gas Board. Our photograph shows Mrs. I. T. Barclay, Dr. E. V. Evans, Mr. Edwin Bayliss, Mr. L. C. Hansen, and Mr. Brian Wood being presented. With the Duchess are the Mayor of Battersea, Councillor D. A. G. Prichard and Mr. Michael Milne-Watson, Chairman of the North Thames Gas Board.

three coal-unloading cranes to work. When the crane had transferred its four-ton load of coal from hold to hopper, the crane driver, Mr. W. R. Whitaker, and his two colleagues, were presented to the Duchess, after which she made a brief tour of the works, watching one of the retort ovens being discharged.

The Duchess then met the Works Committee and unlocked the door of the canteen where she inspected the very fine kitchens.

To Meet Expanding Demand

The new jetty is the first step in a development programme to meet the expanding demand for gas in the western part of the Board's area—supplied partly by the Nine Elms Works. When development is completed within the next few years, Nine Elms will be one of the biggest and best-equipped of the 23 gas-making stations in the Board's area.

The old dock, built in 1907, was unable to accommodate vessels of more than 1,200 tons capacity, and this has meant that five of the most modern of the Board's 14 colliers specially designed for up-river traffic—the 260-feet long diesel class, carrying 2,600 tons—could not call at Nine Elms.

The greater facilities of the new jetty, work on which was started four years ago, will allow all vessels which call there to be discharged with great economy in transport costs.

There are unique features from the engineering point of view in the construction of the jetty. The reinforced concrete deck is 360 ft. long and 47 ft. wide and is supported by 124 piles of novel design. An interesting double process was used in the making of these piles. Spun concrete tubes, 2 ft. in diameter and 45 ft. long, were first sunk in position in rows of eight and then bored a further 22 ft. into the river bed before being reinforced and filled with concrete. It is the first time that piles of this diameter have been used in the new spun concrete technique, a process which gives greater strength.

Another novel feature is the seven sets of sprung fenders provided along the river face to absorb blows from ships. It takes a 26-ton blow to compress the four springs in each fender by one inch.

The Duchess of Kent meets Captain Allan, Master of the M.V. Accum, and members of the crew. Also in this photograph are the Mayor of Battersea, Councillor D. A. G. Prichard and Mr. Michael Milne-Watson.

Unloading of coal has been speeded up considerably by the three new electrically-driven cranes, each with a 4-ton grab which handles 250 tons an hour. Two of these cranes can unload the largest of the up-river colliers in six to seven hours, a contrast to the hydraulic cranes on the old dock, which would take more than twice that time to handle the same quantity.

The big grabs swing down from the cranes to take their 4-ton bite of coal, which then flows on rubber belt conveyors to the top floor of a newly-constructed reinforced concrete hopper at the rate of 620 tons an hour; and it is automatically weighed on the journey. Other conveyors carry the coal from the hopper—it holds 3,200 tons—to retort houses on the works or to a storage ground from which it can be transferred back to the retort houses.

Just as important as efficient coal handling is the need for large quantities of water on the works. The building of the new jetty provided the opportunity to install within its structure a concrete pump chamber containing three electrically-driven pumps each of which forces through to the works 180,000 gallons an hour of filtered river water for steam condensing, gas cooling and other purposes.

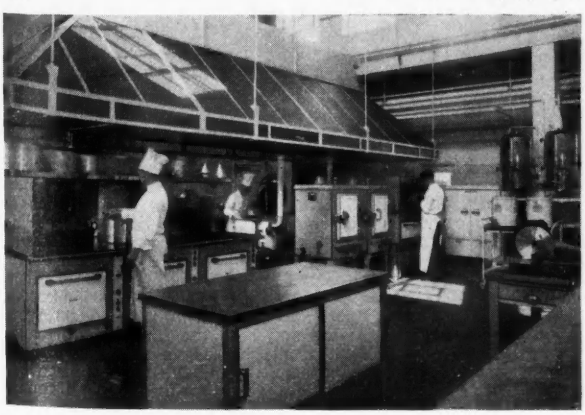
Nine Elms has been making gas since 1863, when the daily output was 2 mill. cu.ft. Standing on a 20-acre site, it is now one of the largest stations of the North Thames Gas Board, producing about 30 mill. cu.ft. daily. The amount of coal carbonised there is about 440,000 tons a year.

About 800 men are employed, and until now they have had their meals in their own sports clubroom. But as it is part of the Board's programme to improve facilities for employees, a new canteen has been built which is light and airy and provides on an average 400 main meals daily, with light meals and snacks for shift workers.

One of the first industrial concerns to form their own fleet of colliers was the Gas Light and Coke Company when in 1912, its first steamship, the Fulgens, sailed on its maiden voyage from a north-east coast port to Beckton with a cargo of 3,700 tons.

On vesting date the North Thames Gas Board took over a fleet which now numbers 24 and has a total capacity of 64,000 tons—a figure which will be nearer 100,000 tons when an additional seven ships, now on order, come into service.

Because of the growing importance of the gas-making stations up-river at Nine Elms and Fulham, the emphasis of the shipbuilding programme during the past few years has been on the 260-feet long diesel-driven colliers which carry cargoes of 2,600 tons. As they are of the maximum size capable of negotiating



A view of the well - equipped kitchen which will serve the new canteen.

the Thames bridges they have proved to be the cheapest possible way of carrying coal in bulk.

Apart from these up-river ships, there are the large steamers which carry up to 4,600 tons and which, because of their size, can discharge only at a below bridge berth—as at Beckton.

The collier fleet of the North Thames Gas Board plays a vital part in the supply of gas to more than 5 mill. people. Last year, with the help of chartered vessels, it brought in about three-quarters of the 4,800,000 tons of coal carbonised at various works throughout the Board's area.

News in Brief

Gas Council Film Library.—The Gas Council has just issued a revised catalogue of films available from its film library. The catalogue also includes a number of film strips which are for sale only. No charge is made for the loan of films from the library so long as there is no charge for admission to the show. A number of the older films have been withdrawn, but the catalogue includes new titles, and several new films are now in course of production.

Following the Recent Opening of the showroom in High Street, Kinghorn, and as a further extension of gas service in the area, four cookery demonstrations were held in the showroom on May 13-16. These were conducted by Miss June D. Lauder, recently appointed home service adviser to the Fife group. The attendances exceeded expectations, and the increasing numbers are attributable to the efficiency and personality of Miss Lauder's work during the week and a desire for an early repetition of the series.

Two Members of Scunthorpe R.E.M.E. (T.A.) operated short-wave radio transmitters to pass messages between workmen engaged in connecting up a new 16-in. gas main at Scunthorpe and local officials of the East Midland Gas Board. The new main will supply gas to housing estates in the New Brumby district, and it had to be connected with existing mains half-a-mile away. By this use of radio the whole operation of laying the main was considerably speeded up.

District Manager at Dunblane, Mr. A. L. McLean, aged 55, was sent to prison for six months by Sheriff A. M. Prain at Perth on May 12. He admitted embezzling £117 between June, 1949, and December, 1951, while in the Scottish Gas Board's employment. Mr. John Adam, solicitor, said that McLean had a family of ten and had had financial worries. He took the money in small portions. For example, he sold 25 gas cookers as scrap for 5s. and kept the money to himself.

Stainless Steel Valves

THE Mutual Security Agency Mission to the United Kingdom has announced that the A.P.V. Co., Ltd., Wandsworth Park, will use the processes and technical data of the Cooper Alloy Foundry Co., of Hillside, New Jersey, for the manufacture of stainless steel valves. The Cooper Company has obtained an M.S.A. guarantee of currency convertibility covering royalty payments by A.P.V. for use of its processes.

The American firm will furnish designs, engineering and production drawings, as well as information on techniques and procedures for the manufacture and use of valves used in the processing of chemicals, brines, petroleum, explosives, paper, and other products involving corrosive and hazardous liquids and gases. It agreed to make this technical data available to A.P.V. under a 10-year licensing agreement, with royalties to be paid for all valves produced with Cooper processes and sold or used by A.P.V. during the period.

The United States Government has agreed to convert into dollars any sterling royalty payments which the American firm is unable to convert through regular foreign exchange channels, up to a maximum of $153,500 over the 10-year period. A.P.V. sales of stainless steel valves are expected to reach a volume of from £100,000 to £150,000, with exports yielding the United Kingdom valuable hard currency through the Company's extensive overseas organisation.

Italian Workers

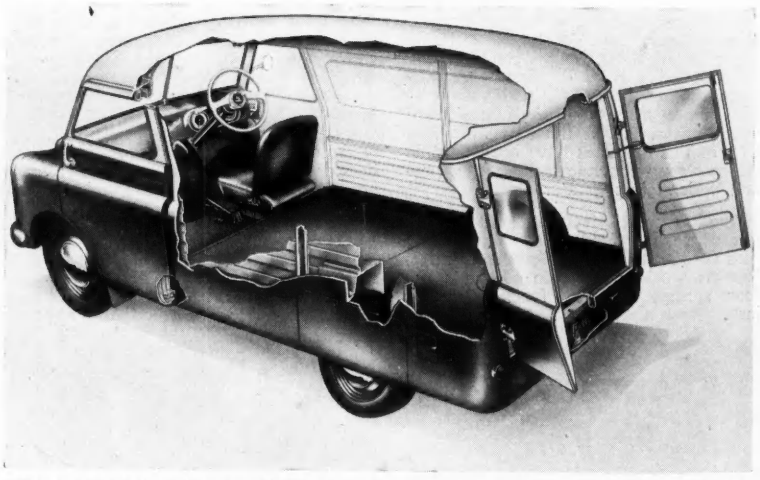
SINCE the National Coal Board's scheme for the recruitment of Italians for coal mining employment began last year, about 1,200 have been taken into the pits. About 1,000 more have been brought to this country under the scheme and are at present in the Board's English teaching centres or in mining training centres.

The scheme was approved at the outset by the National Executive of the National Union of Mineworkers, but it was still necessary to obtain the agreement of the local branches of the union to the employment of foreign labour in individual pits. For some months there has been increasing difficulty in placing Italians owing to the unwillingness of miners' lodges to accept them. The Board is making every effort to overcome the objections, but for the time being there are few places open to Italians.

The Ministry of Labour and National Service is doing everything possible to find other work for the remaining Italians, and officials of the Board and the Ministry (accompanied by representatives of the Italian Government) are now interviewing them at their hostels. Men who wish to return home will be repatriated by the Board.

The 31 Italians suspended from underground work at Bullcroft Colliery, near Doncaster, several weeks ago will not be reinstated but will be treated in the same way as the other Italians who cannot be placed in the mining industry.

NEW BEDFORD LIGHT VAN



ILLUSTRATED is a new Bedford 10-12 cwt. van, now in production. Measuring only 12 ft. overall, it is 16 in. shorter than the model it supersedes, yet the new van has 18% greater capacity (135 cu. ft. compared with 110). Deliveries in confined spaces are made simple by a turning circle of only 33 ft., and wide sliding doors at each side. Semi-forward control gives excellent visibility and load distribution. Full-width doors at the rear, and the maximum unobstructed floor space, simplify loading. Construction is all-steel, except for the detachable plywood floor. The engine is a new four cylinder 1½-litre O.H.V. 'square' unit, of 3⅛ in. bore x 3 in. stroke, developing 40 B.H.P. at 4,000 r.p.m. and 71 lb.-ft. torque at 2,000 r.p.m. It chief features are exceptionally long bearing and bore life, lively performance and marked fuel economy. The independent front suspension, of the wishbone type, operates on the short and long arm principle. An anti-roll stabiliser bar connects the lower wishbones. Double-acting shock absorbers are fitted all round. The new van is produced by Vauxhall Motors, Ltd., Luton, Bedfordshire.

LONDON AND SOUTHERN SECTION I.G.E.

THERE was a large gathering of members and guests at the luncheon which preceded the spring general meeting of the London and Southern Section of the Institution of Gas Engineers at the Connaught Rooms, W.C.2, on May 20. Dr. A. E. HAFFNER, Chairman of the Section, presided.

Colonel H. C. SMITH, C.B.E. (Chairman of the Gas Council), proposed the toast of the Section, recalling that in 1925 he himself had been Hon. Secretary of the former Southern Association when it celebrated its Golden Jubilee. On that occasion messages had been received from a number of pioneers in the gas industry. Among these was one from the late Dr. Charles Carpenter, which he would quote:

> 'Founded with the primary object of giving consideration to and of discussing problems associated with the manufacture and distribution of gas, it has in this connection supplemented, by an enormous amount of useful work, the duties of the parent Institution. That it has existed for 50 years is in itself a complete justification of the hopes and expectations of its founders. If during that time the developments in the manufacture and distribution of gas and a consideration of their concomitant problems have shown the need for such an association—and they certainly have—then the new era upon which it, with the gas industry, is now entering must more than ever test its vigour and vitality in coping with the increasing number of problems—technical, commercial, administrative and economic—with which the industry is faced.'

If Dr. Carpenter were alive today, said Colonel Smith, he felt sure he would say exactly the same thing.

Colonel Smith urged the Section not to confine itself solely to the technical approach. While the technical aspect was most important, he was quite certain that before long they would find that what they were short of was managers, and he hoped the Institution would include some training in administration and management since that was where they were going to fall down in the future if they were not very careful. The former Southern Association had been a great force in the industry in distributing information between gas engineers and managers, and he was confident the new Section would continue in this.

Replying to the toast, Dr. HAFFNER said it was a great honour to the Section that their health had been proposed by Colonel Smith, who was the leader of the gas industry today. He was also a past-president of the Institution of Gas Engineers, to which body they owed their allegience. In addition to having been their Hon. Secretary he was still a member of their Section, which was why they liked to regard him as one of them. As a District Section they had their own special character; they covered the territory of four area boards, and their production represented 36% of the total production of the British gas industry. Their membership was steadily increasing. But their Section would not flourish half so well were it not for many very good friends, of whom Colonel Smith was one.

Mr. C. R. M. CROFT (Senior Vice-Chairman) proposed the toast of 'The Guests,' of whom, he said, the great proportion were very old friends. He referred in turn to all the guests with especial mention of the Chairman and Members of the North Thames Gas Board who had contributed so much towards the success of the past session.

Mr. MICHAEL MILNE-WATSON (Chairman of the North Thames Gas Board), replying on behalf of the guests, observed that the Section was outstanding in its energy not only in the number of its meetings and the good attendances but also in the remarkably high standard of its speakers. One of the most important attributes of management, said Mr. Milne-Watson, was the management of men—the men who worked with them as well as for them. It was so easy to overlook the fact that they could get more out of people by working with them than by driving them. Unless they took the trouble to explain what they were doing they would not get the best out of their staffs; and this was just as important when labour was abundant as when it was in short supply as it was today. He congratulated Dr. Haffner on a very successful year and wished the Section well on behalf of all the guests.

Spring General Meeting

At the Spring General Meeting, which followed, the election of the undernoted officers for the next session was announced:

Chairman.—C. R. M. Croft.
Senior Vice-Chairman.—Dr. J. Burns.
Junior Vice-Chairman.—E. O. Rose.
Hon. Secretary and Treasurer.—A. F. Grant.
Auditors.—H. A. Probin and C. J. B. Sawbridge (in place of C. F. Botley, retired).

Dr. Haffner then presented his Chairman's Address, which will be dealt with in a subsequent issue of the *Journal*.

Proposing a vote of thanks to the Chairman for his address, Mr. J. H. DYDE (President of the Institution of Gas Engineers) said he had known Dr. Haffner for a long time—long enough to have formed a very high regard for his ability as a gas engineer; long enough, too, to value his original thought and his enterprise, particularly in the sphere of education and training; long enough to appreciate his subtle sense of humour which was amply portrayed in his address. This address was the culmination of a very memorable year of office. The gas industry must attract the right sort of entrant at all levels and more particularly it must attract youth. Their Chairman had been very active in that respect, and Mr. Dyde would like to give him credit for the introduction of the Christmas Juvenile Lectures. Having attracted the right sort of people into the industry they must ensure that they receive the right kind of training. The mission their Chairman had pursued throughout his year of office had been training for management, and something must be done about the teaching of management and administrative methods.

Dr. J. BURNS, seconding the vote of thanks, expressed appreciation of an outstanding session. There was a tremendous amount of sound commonsense in the address Dr. Haffner had given them that day.

Reference was made in the Journal *of May 7 (page 303) to a successful exhibition at Oban organised by the Dumbarton and Helensburgh District of the Scottish Gas Board. Our photograph shows Mr. D. D. Burns (Deputy Chairman of the Board), second from left, and Provost W. J. Calderwood, Oban, with their wives, examining some of the appliances on show.*

JUNIOR ASSOCIATIONS

MANCHESTER JUNIORS VISIT JENKINS

THERE was a total attendance of over 150 on May 21 on the occasion of the visit—believed by the President to be the first in its 52 years history—which the Manchester District Junior Association of Gas Engineers paid to the Beehive works of W. J. Jenkins & Co., Ltd., at Retford. Weather conditions were ideal and a highly instructive afternoon was spent in touring the modernised and constantly growing works.

The tour comprised the drawing office, machine shops, smithy, D.B. conveyor chain shops, general stores, pattern shop, plating shops, marking-off boards, tool room, fitting shop, projects drawing office and the laboratory. Particular interest was taken in sets of progress photographs showing the various stages of development of many of the schemes at present being carried out by the Company, the drawings for a large new installation of intermittent vertical chamber ovens about to be commenced at Liverpool, and a number of finished jobs awaiting dispatch to gas undertakings in many different parts of the country.

On arrival at the works the visitors were welcomed by Mr. G. L. Ford, Chairman of W. J. Jenkins & Co., Ltd., Mr. R. M. Goodman, Managing Director, Mr. W. Morland Fox, Technical and Projects Director, Mr. B. Pollard, Works Director, Mr. R. W. Crowther, Technical Director, Mr. M. W. Baker, and a number of senior officials.

With the Manchester District Junior Association of Gas Engineers at the Beehive works of W. J. Jenkins & Co., Ltd., Retford, on May 21. Mr. R. M. Goodman, Managing Director of W. J. Jenkins & Co., Ltd., is on the left, and Mr. G. L. Ford, Chairman of the Company, on the right. In the centre is Mr. C. H. Leach, General Manager of the Liverpool group, North Western Gas Board.

The tour of the works was preceded by luncheon in a large marquee adjoining the beautifully laid out flower gardens at the side of the works. Mr. FORD, on behalf of the Company, extended a hearty welcome to the visitors, among whom he specially mentioned Mr. C. H. Leach, General Manager of the Liverpool group, and proposed the toast of the Manchester District Junior Association of Gas Engineers, coupled with the name of its President, Mr. L. G. Townsend.

The PRESIDENT, responding, said that so far as he had been able to trace, this was the first occasion on which the Manchester Juniors had visited the works of W. J. Jenkins & Co., Ltd., probably because they had been reluctant to trespass on the domain of the Yorkshire Junior Gas Association. He, however, had had the privilege of coming last year as a guest of the Yorkshire Juniors. They had returned the compliment by inviting the President and some of the members of the Yorkshire Juniors on the present occasion, but a visit to Darlington on the same date had prevented their acceptance. Members of junior associations, continued Mr. Townsend, owed much to those who received them in this hospitable way and allowed them to wander round their works with complete freedom. He believed they did it because they were rightly proud of the organisation which they had set up for the benefit of the fuel industries, and because of the goodwill towards the industry which was shown in many directions.

Mr. C. H. LEACH, who also responded for the visitors, said such visits were of great educational value. He had been particularly struck with beautiful drawings of an installation estimated to cost something like £3 mill., which was to be erected by their hosts at Liverpool.

On completing the tour of the works the party reassembled in the marquee for tea, at the close of which the PRESIDENT said that of all the enjoyable visits during his term of office the one to Retford would stand out as the most memorable.

Mr. A. K. HOWELL, Senior Vice-President, proposed a vote of thanks to W. J. Jenkins & Co., Ltd., for their hospitality. The members had been impressed with the fine team spirit not only among the men but between the men and the management. He mentioned especially Mr. Ford, Mr. Goodman, and Mr. Pollard, who had been responsible for the arrangements, and paid a tribute to the senior members of the staff who had acted as guides. Mr. W. T. HAINSWORTH seconded.

Mr. R. M. GOODMAN, Managing Director, who replied to the vote of thanks, agreed that the team spirit was much in evidence; everyone worked for 'good old Jenkins.' They had many men who had been in the service of the Company for 50 years, and they now had 110 apprentices; he hoped there would be 200 by the time the Manchester Juniors paid their next visit. He wished to take the opportunity of paying tribute to a few gas engineers who had allowed them to hold back the delivery of some of the work they had done for them, in order that the Juniors might have an opportunity of inspecting it. He also acknowledged the help of his colleagues on the Board, the staff and workpeople and all concerned.

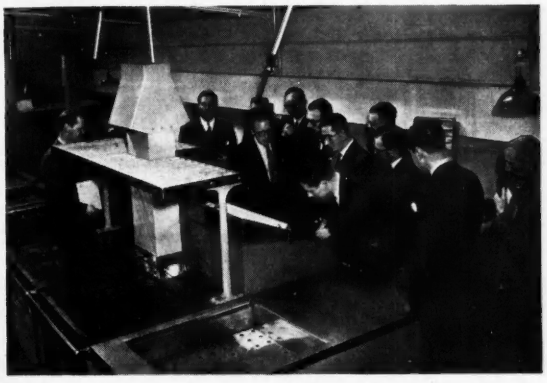
Mr. W. Morland Fox, Service, Sales, and Projects Director, (left) describes some of the work in hand for the North Western Gas Board to Mr. L. G. Townsend (President of the Manchester Juniors) and (right) Mr. W. T. Hainsworth (formerly on the staff of the Company and now Group Production Engineer to the Oldham-Rochdale group).

The results of the ballot for the election of officers for the 1952-53 session were announced as follows: President, A. K. Howells; Senior Vice-President, J. Oates; Junior Vice-President, A. H. Barrington; Hon. Secretary, T. W. Pickthall; Hon. Treasurer, H. Partington; Council, N. R. Bowman, J. Hepworth, T. Nicklin, N. Olsen, M. Redman, and L. G. Roberts; representative on Education Committee, L. G. Townsend.

LONDON AND SOUTHERN JUNIORS VISIT BENHAMS

A LARGE party of members of the London and Southern Junior Gas Association visited, on May 21, the Garratt Lane, Wandsworth, works of Benham & Sons, Ltd., when they spent a most interesting afternoon watching the construction and assembly of large-scale catering equipment for which this firm is well known throughout the industry.

While Benham appliances are designed to use town gas, natural gas, butane, oil, or electricity, one gained the impression that town gas takes the major share of the firm's output. Construction is on the 'unit' principle, which means that apparatus of almost any desired size can be built up to customers' requirements merely by the addition of further units—thus effecting considerable saving in parts and machinery. We noted one order in course of construction which combined both gas and electricity as heating agents. On enquiring the reason for this we were told that it was for an overseas market (which shall be nameless) where both gas and electricity supplies are so unreliable that the customer insisted on alternative fuels as an insurance against the failure of either. We can only hope that both supplies do not fail simultaneously!



Members of the London and Southern Junior Gas Association, including (second from left) the President, Mr. J. D. C. Woodall, examining a Benham gas range complete with bain marie and deep fat fryer. Also in the group is Mr. J. E. Grey (Hon. Secretary) and Mr. C. D. Shann (Senior Vice-President).

Our readers are so familiar with the products of this well-known firm that it is only necessary to say here that the visitors saw in course of construction Solid-top ranges, Wigmore ranges, general purpose oven units, boiling tables and hotplates, roasting and pastry ovens, salamanders, toasters, and grills, together with many other specialised appliances. The firm's deep fat fryer, also constructed on the unit principle, has lately been re-designed to give a marked increase in efficiency. This has been effected by introducing a series of heat exchanger tubes with a large heating surface. Below the exchanger is a cool zone which preserves the oil by preventing food particles from becoming charred and contaminating it. Benhams are also making sterilising equipment, in stainless steel finish, for hospitals. Thermostatic control is an integral feature of most of the appliances, and grey or white enamel finish is almost universal—though just here and there one is surprised to note orders being executed for customers who still ask for black finish. However, it is the firm's policy to supply so far as possible exactly what a customer demands—so if he wants a black finish he can have it.

One was impressed by the fact that Benham equipment is 'tailor-made' and assembled by skilled craftsmen, though with the help, of course, of up-to-date machinery in all departments.

At the conclusion of the tour of the works, the visitors were entertained at tea, when the PRESIDENT (Mr. J. D. C. Woodall) voiced their thanks to the firm for a most interesting afternoon. It was, he believed, the first occasion on which the Association had visited Benhams, which considering the firm had been going for 150 years and the Association for 50 was a rather surprising fact. They had been immensely impressed with all they had seen. The firm set a very high standard in all the equipment it produced, and it had contributed in large measure to the progress of gas in the sphere of large-scale catering. Benhams represented the best type of British firm, said Mr. Woodall, in that they were content with nothing less than the best. He also expressed their thanks to the guides who had shown them round and explained everything so clearly.

Mr. W. L. CLARKE (a Director of the firm), in acknowledging the President's remarks, said they had seen that afternoon only quite a small part of the firm's undertaking. There were two other works which went to make up the whole. Mr. J. C. MORRIS (another Director) also expressed the firm's appreciation of the Association's interest in making the visit.

After tea a number of members availed themselves of the opportunity of inspecting the enamelling department in adjacent premises.

WESTERN

THE Managing Director of Strachan and Henshaw, Ltd., Bristol, Mr. G. W. GROSSMITH, reviewed some of the mechanical handling problems posed by the gas industry when the Western Junior Gas Association visited the firm's Victoria Road works.

In a talk after members had been shown round the works, Mr. Grossmith said that the gas industry was improving its works and getting control of factors which used to make them difficult for handling plant and led to a good deal of maintenance. There was, however, still a need for robustness in handling plant because of the 24-hour service of the industry. Two alternative principles, he continued, could be applied to handling—intermittent and continuous. For long distance and high capacity the application of the continuous principle was recommended. The intermittent system was worth considering over short distances—the skip hoist as compared with the belt conveyor, for instance.

The skip hoist was being built for higher capacities than was thought likely. It was competitive in regard to cost and many would say it was more competitive still on maintenance, especially when it comes to the handling of coke. Of the problem of the best type of mechanical handling equipment for the stocking area, Mr. Grossmith said that the stocking area was a necessary evil because they did not need it in production and yet sometimes they must be able to put coal into store at high speed and get it out at high speed. In the meantime it was dormant and the machinery tended to have a low load factor. The telpher system was one way of meeting these requirements, and when stores were receiving several types of coal which might have to be blended there was a higher load factor which might justify the more expensive plant.

Members of the Western Junior Gas Association at the Victoria Road Works, Bristol, of Strachan & Henshaw, Ltd. Pointing out a feature of the pulsating screen is Mr. R. Bellinger, the firm's chief designer.

Coal was normally required either in the stocking ground or in the plant and the mobile telpher could be moved from the stocking ground to the plant and the same machine

could serve several fuel consuming points and the stockground. This meant that the whole of the capital outlay need not be charged to the coal stocking ground.

Mr. Grossmith recommended the right angle tipper for the small works, with, say, a coal intake of 200-250 tons a day in wagons. These could be unloaded either by men, which was rather uneconomical, or tippler, which was capable of discharging all of them in about three-quarters of an hour. With a right angle tipper a man single-handed could unload wagons at the rate of 30 tons an hour.

Another method of getting coal from wagons was by grab, which had the advantage that no excavations were needed. The telpher over a line of wagons could grab from any one. A simple and comparatively low track running over the wagons could be installed, and with the help of one trimmer 30 wagons could be unloaded per hour.

Chairman of the Association, Mr. T. W. CLAPHAM (Bristol), thanked Mr. Grossmith for his talk and the firm for providing a fine display of models showing wagon tipplers and mechanical handling equipment.

WHESSOE VISITED

THE Yorkshire Junior Gas Association had a full day on May 21 at Darlington. During the morning a business session was held at the King's Head Hotel, when a paper was given by Mr. K. W. Francombe, of Whessoe, Ltd., on 'The Contractors' Place in the Gas Industry.' The paper is published in our issue to-day. After the meeting the members were the guests of Whessoe, Ltd., at lunch, when they were welcomed by Mr. A. G. Grant, Director and General Manager, who referred to the firm's historical background and emphasised the attention now paid within the organisation to human relationships. The success of the firm was in ratio to the sum of the individual effort put in and the individual enthusiasm displayed.

Whessoe is, in fact, the oldest engineering concern in Darlington, and one of the oldest in Great Britain. It was in 1790 that William Kitchen established a foundry, and 1831 saw the establishment of W. A. Kitchen's railway engine works, known as the Whessoe Foundry. The business passed to Thomas Coates in 1890 as the Whessoe Foundry Co., Ltd. Railway work was dropped and the company entered the gas and oil industries. In 1920 it was turned into a public company, and in 1940, after 150 years continuous iron casting, the company's foundry activities were terminated, and in 1945 the name was abbreviated to Whessoe, Ltd.

Tribute to the service rendered by Whessoe to the gas industry was paid at the luncheon by Mr. H. Dearnley, President of the Association.

During the afternoon members—and there were about 80 present—enjoyed a tour of Whessoe's extensive and well equipped works, which is laid out for fabrication of medium and heavy platework. The modern facilities include one of the finest heavy-duty welding shops in the country, the latest types of X-ray apparatus, and fully equipped testing laboratories. The works and erection departments employ upwards of 1,400 skilled personnel, and there is a comprehensive scheme for the recruitment and training of apprentices. Great interest was displayed in the X-ray apparatus and also in the phosphoric acid pickling plant for the removal of mill scale from steel plates and their subsequent coating with iron phosphate which inhibits under-paint corrosion. When so processed the plates are immediately coated with a red lead-graphite priming paint to protect the phosphate layer. This process results in a considerable reduction in annual painting charges and minimises corrosion troubles.

Tea in the canteen concluded the proceedings, the thanks of the Association for the firm's hospitality being voiced by Mr. C. J. Broome, Senior Vice-President.

WALES AND MONMOUTHSHIRE

THE 27th annual general meeting of the Wales and Monmouthshire Junior Gas Association (Northern and Southern areas) was held at Llandrindod Wells on April 17. The Association was welcomed to Llandrindod by Mr. C. B. Felton, Engineer and Manager of the Llandrindod undertaking, who stated he had been a member of the Juniors for 30 years and was President in 1927-28.

An official welcome on behalf of the Llandrindod Council was afforded to the Association by Councillor EDWARDS, supported by Councillor CRIMES, member of the local committee of the Gas Consultative Council, and Mr. Emlyn Jones, Town Clerk.

Mr. S. G. MEADE thanked Mr. Felton and Councillor Edwards for the welcome given to the Association.

The annual report of the Council was adopted on the proposition of Mr. K. L. THWAITE (Neath) seconded by Mr. D. MUIR.

Officers were elected as follows: *President:* H. Buckley (Pontypool). *Vice-President:* Richard Jones (Wales Gas Board, Cardiff). *Junior Vice-President:* J. Woodcock (Colwyn Bay). *Treasurer:* C. E. Banham (Cardiff). *Librarian:* H. J. Newman (Pontypool). *Secretary:* R. J. K. Shepherd (Neath). *Council:* T. Edwards (Newport). *Auditors:* T. E. Tyrell (Cardiff), and W. E. Crowley (Wales Gas Board, Cardiff). *North Wales Section Committee:* C. W. Butler, H. Breeze, H. J. Stanley, and R. H. Tompkins.

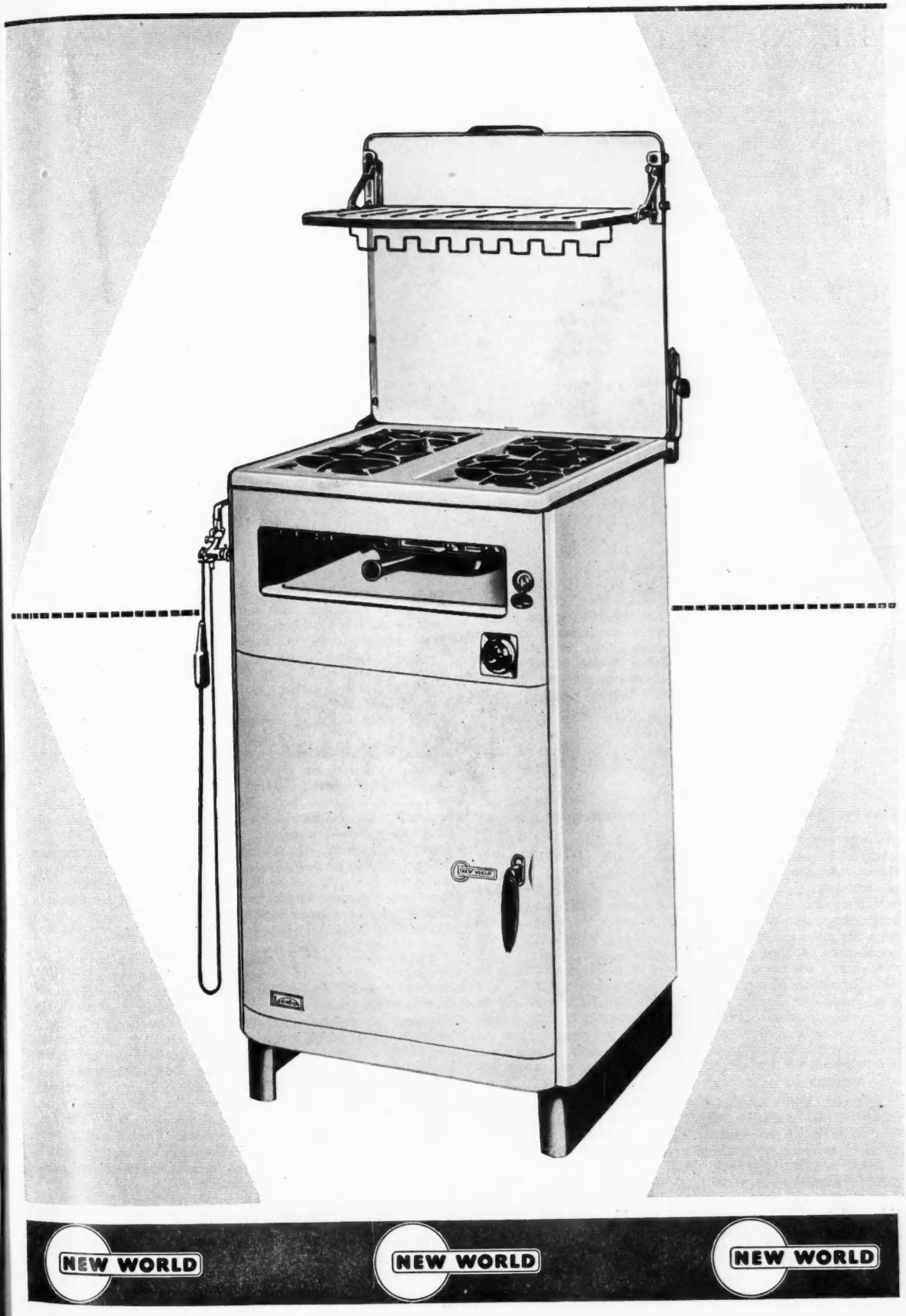
Mr. C. E. BANHAM presented the Treasurer's report, which showed that it would be necessary to increase the subscription to meet higher costs, particularly the cost of the Transactions.

Mr. MEADE then read his Presidential Address.

Mr. H. BUCKLEY proposed a vote of thanks to Mr. Meade. The vote of thanks was seconded by Mr. J. WOODCOCK.

Mr. J. NEWMAN read a paper on 'The Value of Carbonisation Control and Efficiency.'

Group photograph taken on the occasion of the visit of the Yorkshire Junior Gas Association to Whessoe, Ltd., Darlington, on May 21.


NEW WORLD
NEW WORLD
NEW WORLD

THE CONTRACTORS' PLACE IN THE GAS INDUSTRY

By K. W. FRANCOMBE, M.Inst.Gas E., M.Inst.F.
(Whessoe Limited)

Paper to the Yorkshire Junior Gas Association, May 21, 1952

GAS industry contractors have a long and honorable tradition of service to the industry. Indeed it may be said that they played such an important part in its foundation and subsequent development, that now, reference to the 'gas industry,' embraces not only the nationalised industry, but also its contractors. Examples of their early contributions come readily to mind. In 1950 the well-known firm of W. C. Holmes & Co., Ltd., celebrated its centenary and with it 100 years of service to the gas industry. The founder of this firm, William Cartwright Holmes, 'less than 10 years after the death of William Murdoch, turned his interests towards the construction of gas-making plant and set the course of the business which has endured for a century.'* During the second half of the 19th century this firm was building complete gasworks and in addition, was rendering financial assistance to the purchasers and thus becoming part-owners of many undertakings.

The founders of other firms assisting in the early development of the industry will spring to mind—Henry Balfour, John Clapham, George and Samuel Cutler, Robert Dempster, Bryan Donkin, Jonas Drake, Benjamin Gibbons, A. C. Humphreys and A. G. Glasgow, George Newton and Thomas Chambers, Charles Walker, George Waller, John West—just to name a few of those whose work for the industry in the 19th century is still commemorated in the titles of the firms which bear their names. The author's own company was founded in 1790, although it was not until the second half of the 19th century that it was engaged on gas industry contracts. More recently, but still at the beginning of the present century, the pioneer work of the late Sir Arthur Duckham and Colonel H. W. Woodall, at Bournemouth and subsequently with the famous firm which bears their names, will be recalled.

It might be considered invidious to mention present-day leading personalities among the gas contractors, but reflection will bring to mind the outstanding recent contributions made by many notable figures on the contracting side of the industry, to its continued progress.

The Special Position of the Contractors

Every contractor is necessarily a specialist and has an intimate knowledge and experience of the plants he builds. He may be dealing with scores of individual plants while the gas undertaking, and even the area board, may only be dealing with few. His field is not restricted to any particular area but will embrace the country as a whole and often many foreign countries too. He thus amasses a broad knowledge of the installation and operation of his plants under many diverse conditions. He has a wide range of technical contracts as he will discuss his plants with many gas engineers. If he is a good contractor, he will profit by this experience and will be continually improving his designs. Competition will provide the incentive, if indeed any is required. In general, then, he is in the best position to develop the many unit systems from which is built up the complete process of town gas production and purification.

In a competitive market he must necessarily keep a close watch on the economics of potential development and knows that ideas which are merely clever, or designs which are merely ingenious, are rarely of practical value. The important criterion is that they should result in the reduction of capital costs or, more important, of total annual charges. His realisation of what constitutes a practical development and a workable design will ensure that he keeps his feet firmly on the ground. He has to fabricate and to market his plant and does not fall for every starry-eyed inventor's dream.

His works are specially laid out for the economical fabrication of his specialities, and the importance of this factor should not be minimised. A good engineering works can make almost anything, but it is usual to find that it is only the specialist concern which can make it economically. He employs a skilled and experienced staff in his works and his offices, on the basis that his function is not merely to fabricate but also to design and develop. It is to be hoped that he will never be deprived of these functions as he would then no longer be in a position to employ his skilled and costly technical and engineering staffs. Turn him into an 'ironmonger' and the industry would be deprived of one of its most important assets.

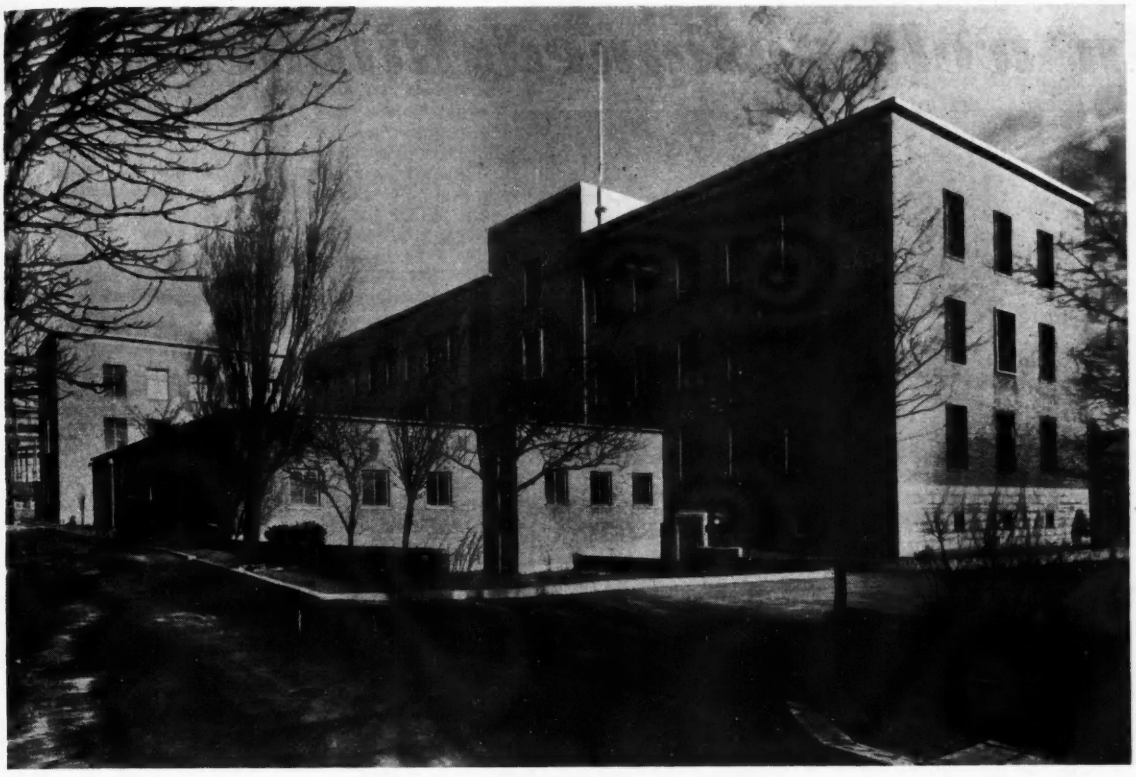
Collaboration between Industry and Contractors

The contractor can retain his special functions only so long as he merits the full confidence of the industry. Once he has installed the plant and handed it over in working trim, he must usually carry out performance tests, in order to check his basic design data with the performance realised, if he is to profit fully from the installation. Unfortunately he is inevitably deprived of the pleasure of continuing to 'live' with a smoothly operating plant and of thus enjoying the long-term fruits of his labour. Accordingly, he has much to learn from those responsible for the subsequent operation of his plants. It may be unusual for a contractor to receive operating reports unless a complaint is being voiced, but it would be of great benefit if he did, particularly in respect of operation under a variety of conditions, as seasonal variations of loading and ambient temperature may provide valuable additional information. The contractor will also benefit from the constructive criticisms of his designs, even though it may not always be possible to implement them. He is not necessarily adopting an off-hand attitude if he does not, as there may be no unanimity of opinion as to the desirability of such emendations and in the interests of standardisation he may only be in a position to concede to majority opinion. It may not also be possible to include as standard certain features which, however desirable, might result in the loss of orders in competition when the contract is awarded to the lowest tenderer. However, in these circumstances he may often find it advisable to include for such features as an extra, when the purchaser can assess whether the additional expense will be justified.

Not only in respect of detailed improvements but also on the larger question of long-term developments must the contractor derive inspiration from the industry. He must therefore be aware of its future requirements when he is planning the development and research programme he must initiate—indeed which it will pay him to initiate, since he must live. This awareness of the industry's requirements will not be disclosed 'on a plate' but must derive from a close collaboration and a cordial staff relationship at all levels in the industry's structure. It is probable that never in the history of the industry has the collaboration between the two sides been so amicable as in recent years. The contractor now enjoys equality of status both in the membership, and indeed on the governing Council, of the industry's professional association, the Institution of Gas Engineers.

The author believes there is only one affiliate of this chartered body wherein membership is not open to the contractor—wherein, indeed, the contracting engineer is not *persona grata*. The elder statesmen of both sides—the

*W. C. Holmes and Co., Ltd's. publication 'One Hundred Years of Endeavour in the Service of the Gas Industry' (1950).



The Whessoe offices at Darlington, built 1948.

contractors' directors and the industry's area boards—are usually on terms of cordial friendship, based on a mutual respect for the other's functions and abilities, and this pattern is followed throughout the respective organisations down to the contractors' operators and the undertakings' shift foremen. Until recently there was indeed quite an interchange of staff between the two sides.

'Until recently'; it may be asked, does this qualification imply that the peak has been reached and that there is some danger of retrogression in the collaboration which had been so zealously fostered until the industry was nationalised? Are contractors perhaps becoming a little wary of allowing members of their staffs to be tempted to join the industry when the Gas Act envisages the right of the area boards to build their own plants, if needs be? The author poses these questions without being in a position to answer them. However, it would appear that certain organs of the Technical Press have held strong views on some of these questions and during the past months have not been backward in voicing them.

Under the title of 'Don't "blue-print" the contractors,' there has been editorial reference to an increasing tendency on the part of certain area boards to relegate contracting firms to the role of fabricators and erectors, and a plea was therefore made not to deprive them of their design and development functions. The H.Q. personnel of some area boards certainly includes technical staff capable of taking over the basic design rating of unit plants, and while presumably the original intention was to employ such process engineers to plan new installations, and to provide technical criticisms of contractors' proposals, there is the ever-present danger that certain area boards' future requirements may be detailed so closely as to leave little scope for initiative by the contractors.

As a result of discussions which have taken place between the Gas Council and the Council of the Society of British Gas Industries, it has recently been announced that a plan has been formulated, and accepted, for joint collaboration between these two bodies for research on various scales. Perhaps the most interesting of the proposals is for the formation of a Joint Consultative Committee, with membership by nominees of the Gas Council and the S.B.G.I. in equal numbers. This will be a policy committee and will not be tied by precise terms of reference. It is anticipated that this committee will select subjects for research which will be studied by research panels and then delegated to research teams.

This plan will no doubt go a long way to meet the criticisms in the Technical Press, of the dissolution of the Gas Research Board, following the pronouncements of the Gas Council's Chairman-elect at the 1951 autumn research meeting of the Institution, and in the Gas Council's 2nd Report and Accounts 1950-51. Whatever may transpire, the contractors' aim will always be the preservation of the cordial relationship which has for so long existed between both sides of the industry, but it is to be hoped that they will never be deprived from continuing to contribute to the common good their specialist knowledge of design and development matters.

On the Employment of Contractors

(1) *Information Required for Tendering*

As with all planning, it is axiomatic that the plan should be based on sound information. It is therefore important that the contractor is taken fully into confidence and told exactly what is wanted, and why. A preliminary discussion will often repay the time so spent. For example, the gas engineer may not realise how costly certain of his requirements may be. When the curve relating plant efficiency to plant size is becoming asymptotic, it may be uneconomical to specify a margin over the desired performance, greater than is essential. Random examples which will illustrate this point may be given. An electro-detarrer which is required to remove 99.9% of tar fog will be half as large again as one to remove 99%, and a static scrubber to reduce the outlet ammonia concentration to 2.5 grains per 100 cu.ft. of gas, when

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producing ammoniacal liquor of a given strength, may necessitate the employment of 33% more stages than is required for 6 grains per 100 cu.ft., although most authorities would regard the latter concentration as entirely acceptable for purifier operation. The contractor knows this, but the purchaser may not. A preliminary elucidation of such matters may avoid the preparation of several competitive tenders and the subsequent revision of them all when such matters come to light. The fuller the information provided, the better. Contractors' questionnaires, although sometimes appearing formidable, are not red-tape, as in a competitive world this cannot be tolerated. The information is really needed if the most suitable proposals are to be made, to the undertaking's advantage.

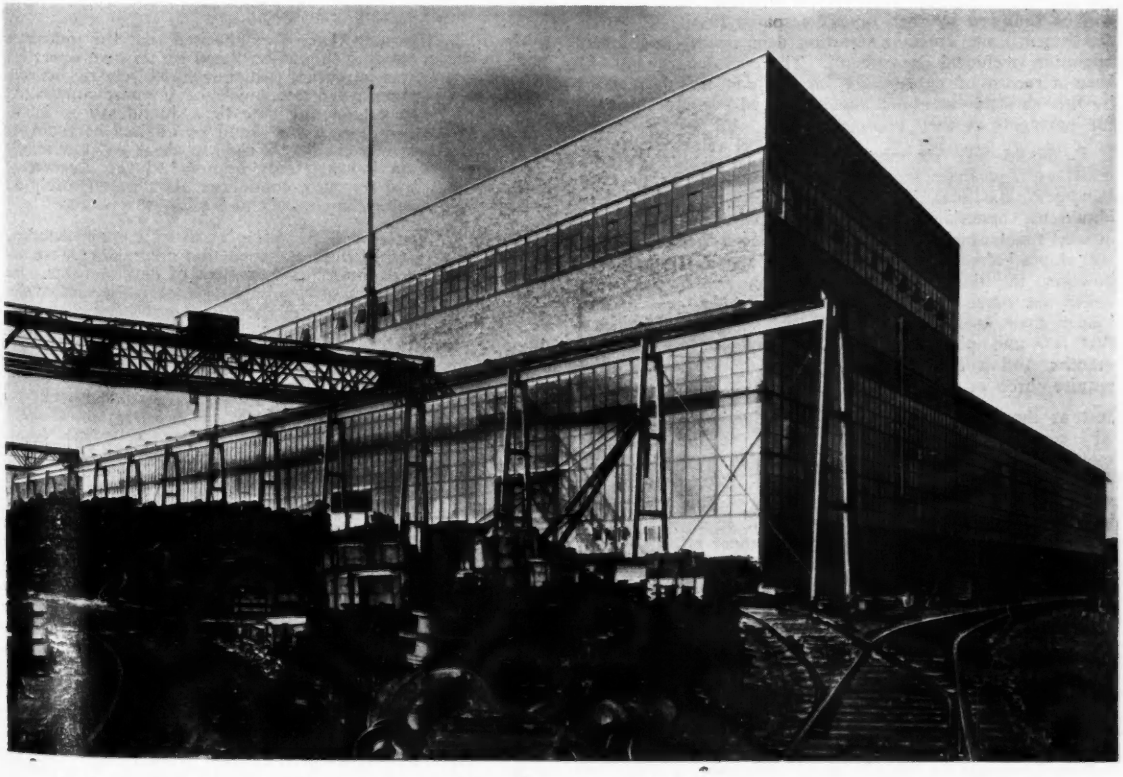
(2) *The Time and Cost of Tendering.*

It may be of interest to outline the routine procedure adopted by a typical contractor when an invitation to tender for a unit plant is received. If such enquiries entail basic chemical engineering design, they are passed to the technical department, which becomes responsible for raising any questions which the enquiry does not make clear and, if necessary, for arranging for the visit of a technical representative to discuss the matter. When all the required information is received, this department then 'rates' the unit—*i.e.*, it prepares the basic design, which is transmitted as a memorandum, when necessary illustrated by sketches, to the estimating and to the projects engineering design department. The projects department prepares any necessary arrangement drawings and issues enquiries to sub-contractors, finally embodying all the design details in a specification. The estimating department is then responsible for listing and costing the materials and apparatus required and of adding the works and erection wages involved (in collaboration with the departments concerned) for the fabrication and erection of the complete plant. The erection department may also arrange for an inspection of the site and of the means of access thereto. The estimating department thus arrives at the sales price of the plant, and this is incorporated in a tender letter outlining the terms and conditions of the proposals, supplemented by specifications, drawings, and brochures. Finally, the sales department will arrange for a discussion of the tender with the prospective client.

It will be appreciated that even with relatively simple tenders the procedure outlined takes an appreciable time in its passage through the several departments involved. Even if staff should be available to deal with the enquiry immediately it is received (and there can rarely be economic justification for this), the time required will usually be at least three weeks for a relatively simple tender. This time will be increased by whatever time lag is involved in arranging for the enquiry to take its correct precedence. It is therefore unfair to expect a contractor to tender in less than three or four weeks for a simple unit, and for more complex or multi-unit installations it may be desirable to allow anything up to three months. These times relate to the class of gas plants supplied by the author's firm, but no doubt carbonising plants and coke oven installations will take considerably longer—perhaps anything up to six months may be required. These times can only be reduced at the expense of enquiries previously received, which is undesirable.

It will be understood that not only does it take some considerable time to deal with an enquiry, but that the expense may also be appreciable. For example, the cost of tendering for a typical static scrubber is of the order of £35; or, for a condenser, of the order of £65; or, for a large set of purifiers, of the order of £450; or, for a complete wet purification plant from retort house to purifiers, of the order of £800. These figures exclude the cost of sub-contractors' tenders, which may total a considerable extra.

A plea is now therefore made for the careful preliminary consideration of enquiries before issue, to avoid the possibility of subsequent revisions; for the issue of firm enquiries,



South Elevation of main Whessoe manufacturing shops, completed 1951 as part of extensive modernisation scheme.